

Claim 66 defines overcoming stiction by applying a voltage to a levitation electrode. Flipping is achieved by applying a voltage to a *second* flipping electrode. While Webb does deflect the panel using a voltage on the address electrode, it does not overcome stiction in the manner required by the claim, but in an altogether other manner.

Claims 67-70 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Webb in view of Park. Applicants respectfully traverse the rejection. Applicants respectfully submit that the combination of Webb in view of Park does not provide a *prima facie* case of obviousness.

Looking first at claim 67. Again assuming *arguendo* that the flipping of claim 67 is met by the deformation of Webb, the combination still does not teach the invention for a number of reasons.

A) Firstly, claim 67 defines a method by which the vibration is achieved, namely by vibrating the panel. Furthermore, the vibration in claim 67 is effected by electrifying a piezoelectric material coupled to the panel. Park, to the extent that it teaches anything relevant, teaches inducing vibrations to an *object that is suspended*, by inducing vibrations with an electric field.

B) Even if one were to learn from Park that stiction should be overcome by vibration, there is no teaching of inducing vibrations to the *substrate* and certainly not by using a *piezoelectric* material.

C) As to the combination of the references, applicants submit that they are not combinable. The only reasonable teaching of Park that could be applied is to vibrate a non-contacting element (i.e., the beam when it is not touching one of the landing electrodes). However, this would not be of any help in Webb since the stiction reduction in Webb is required when the beam *is* touching the landing (*at rest* and about to move). In Webb, the beam is stationary other than when it is being flipped from one position to another. In Park, it is never stationary. Furthermore, even assuming that Park taught that vibrations should be applied *somewhere*, the mechanism of inducing vibrations in Park does not lend itself at all to incorporation into the apparatus of Webb. The electrode structure is just completely different.

D) There is no teaching in Park of inducing any vibrations to the panel. Since the vibrations in the hanging object are induced naturally by the operation of the device, the induction of vibration in the substrate of Park would make no sense.

In summary, claim 67 is not *prima facie* obvious for at least the following reasons:

1) There is no reasonable way to combine the vibratory mechanism of Park into Webb.

2) Even if there were a way to combine the two, there is no teaching in either reference of vibrating the panel.

3) Even if there were a teaching of doing so there is no teaching of utilizing a piezoelectric element to induce the vibrations.

4) If the two references were somehow combinable, the result would not read on the claim.

As to claim 68, many of the reasons for lack of combinability of Webb and Park, as applied to claim 67 hold for claim 68 as well. As such claim 68 is not *prima facie* obvious.

There is no reasonable way to combine the two references into a working device. The mechanism for inducing vibration in Park is not applicable to Webb.

Furthermore, there is no teaching of a separate stiction countering electrode (separate from the force providing element) in either of the references as required by claim 68.


Claim 69 is not *prima facie* obvious at least for the same reasons as claim 68. In addition, it requires both a force producing electrode for moving the part and a separate stiction countering electrode which applies an electric force. No possible combination of Webb and Park (if any exist at all) has both these elements.

Claim 70 is not *prima facie* obvious at least for the same reasons as claims 68 and 69.

Applicants further point out that they did not receive initialed by the Examiner, two 1449 forms, filed in a First and Second Supplementary Information Disclosure Statements on October 3, 2002 and November 10, 2003 respectively. Applicants are resubmitting the forms herewith and respectfully request that the items listed thereon be initialed by the Examiner to ensure that they appear on the face of the patent issuing on the present application. Applicants assume that the art has already been considered by the Examiner in accordance with MPEP §1893.03.

In view of the above remarks and terminal disclaimer, applicants submit that claims are patentable and that the application is in order for allowance. Notice to that effect is respectfully solicited.

Respectfully submitted,  
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